S: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

Though Monckton reports (1921) a few large villages in the early post-contact period, it is only recently, in response to Australian pressure, that multi-clan villages, with populations ranging from 100 to 500, have become common. Most of the plantations found in the Northern district have been established by Australian ex-servicemen supported by government loans. A number of Orokaiva have been drawn to work on these plantations, others to jobs in Popondetta, others again to service with the police, the armed forces or employers outside the district. Such migration has substantially reduced the proportion of the male village population group.[2]

2. *Technology and Aesthetics*

We possess only the briefest description of Orokaiva industry (in Williams 1930). Although I did collect additional data, the traditional technology has been transformed to such an extent that my data must needs be fragmentary. The only axes and adzes now in use are made of steel; most of the various stone-made cutting tools described by Williams are no longer in use, being replaced by the ubiquitous bush knife wielded by young and old, male and female. One exception is worth noting, if only to emphasise an element of continuity: cockle shells are still used for the scraping of coconuts and for the shaping and decorating of pots. Most of the needles used by women are still made of flying fox bones (*poma*), even though a few needles have at times been obtained from the Mission. While files for sharpening tools are necessarily made of steel, rough leaves still serve as tools for scraping pots, smoothing down wood, etc. The same mixture in the use of basic tools is found in agriculture, hunting, and fishing: we still find the digging stick but also the axe; traditional hand nets and fishing spears (with steel tips), but also snorkels. For hunting, traditional devices have been almost entirely replaced by the shot gun. The old technology is still basically intact in those few industries which are directly related to ceremonial life: the making and decorating of loin cloths, feather headdresses, ceremonial weaponry, musical instruments such as drums. Certain other specifically feminine artifacts (mats, baskets, string bags) are still produced and in use, while much of the contemporary Orokaiva house-building technology is traditional, Fine wickerwork for ceremonial objects (armlets, spear decorations, etc.) is still made by some of the older men. Orokaiva women have almost stopped making pots, though this was an important industry in pre-contact times. While trade goods are used for everyday purposes, such pots as are still made serve as gifts to women at the time of marriage. They are kept for sentimental reasons, but we were able to see only very few.

An everyday Orokaiva meal consists of taro, often with a few vegetable condiments: coconut milk, cordyline tips, or edible pitpit,[3] or one of a number of herbs, sometimes of supposed medicinal value. Much care is devoted to the cooking of the taro and variety is provided partly by a choice from many varieties of taro growing in most gardens. In the dry season, any of a number of subsidiary foods (sweet potato, German taro, yam, banana, breadfruit and several others) may be added to make the taro stretch further. Meat or fish is eaten only rarely, usually on festive occasions. Foods like tea, sugar, bread and salt are also reserved for such occasions. Although several traditional methods of

5: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

241 wet season throughout the Northern Territory. On the Mount Lamington
[132] foothills, the dry season is comparatively short and somewhat undependable, but it is usually over by the beginning of September. Here cultivators must be sure to have enough dry weather for a successful burn prior to planting. 'A significant proportion of the mineral energy upon which swidden cultivates draw for their growth comes from the ash remains of the fired forest, so that the completeness with which a plot is burnt is a crucial factor in determining its yield, a fact of which probably all swidden cultivators are aware.' (Geertz 1966: 22–3) Furthermore, it is unwise to leave the burn until too late in the dry season, for if the soil has dried out (which it does quickly in the tropics), taro plants develop few shoots, so that the gardener may be short of shoots for planting out. Hence, I was told, a very substantial amount of clearing and planting needs to be done between June and August. There is thus a flush of produce nine or ten months later, i.e. from April to June. The same rhythm also applies in drier areas, nearer the coast, such as Inonda, because there the danger of the soil drying out is even greater and the dry season much longer. When we find that the principal Orokaiva feasting season is from April to June, we can see that this is ecologically determined, as it is then that taro is most plentiful.[5]

243 While most subsidiary crops are grown in the taro garden, it is a fixed rule
476 that taro and yam should never be grown together. While taro is usually grown by individual households, yams are planted and harvested by co-operative groups, around the same time as the main taro planting and harvest, but yams are usually stored for several months until the next dry season. Yam houses are built in yam gardens and used for the storage of no other crop.

245 *Arboriculture.* Although the Orokaiva traditionally planted coconut, betel-
249 nut and a few other trees in gardens, villages and in the bush, their arboriculture
177 used to be rudimentary in comparison to their precise and detailed attention to
473 tubers, especially taro. The Australian authorities had hardly established themselves in Papua before they began to press the population into extensive arboriculture that would yield a cash income. One of the early 'native regulations' (No. 121, passed in 1903), compelled all Papuan villages to grow a stipulated number of rubber trees. Three such rubber stands were established at Sivepe, ranging from one half to three acres in area, all village men supposedly sharing in the work. Rimoldi (1966: 86–93), who describes in detail the vicissitudes of exploitation of these trees, shows how ill-adapted communal rubber stands are to a society lacking institutions for the distribution of corporate assets to its members. Nonetheless, a further stand was established, this time quite voluntarily, in 1964. They are known as the 'company trees', have not yielded any cash, and will be discussed in detail below as the land transactions involved cast light on the ideology of contemporary Orokaiva co-operative movements.

245 'Communal' village plantations for coffee were established in the Northern
473 District under the same regulations as applied to rubber, but all producing trees in the villages I visited had been grown on quasi-individual holdings. First plantings were around 1955. On a rough estimate I would say that the number of trees in Sivepe and Hohorita, two villages on the foothills, were 3,500 and 15,000, while Inonda, on alluvial plains, had 800. Coffee is one crop that

5: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

This model is very similar to the exchange cycle in which meat is served as the mediating element. I have already pointed out that taro, displayed on a huge and impressive platform, is an essential part of the gifts offered at a feast. I did not then quote the folk explanation of this. I was told that harvest feasts are beneficial to the donors because feasts make the taro grow well. On further enquiry I found that the Orokaiva believe that taro *always* grows well except if sorcerers from other villages put a spell on it. One of the rituals at a feast is a kind of rain-making ritual performed by medicine men from among the *guests*. When I asked: 'Why the guests?', I was told that they would be expert at removing the bad magic from the gardens because, in all probability, it was they who put it there! We can now see why it is that the guests' forgiveness, in the model, leads directly to a magical increase of taro. I was also told that the increase in the taro harvest would enable the hosts to give another feast soon afterwards. As this second feast would normally not be given to the same group as the first, the idea suggested by the model is that successful feasts enable a village to give an infinite series of feasts, thus attracting an infinite number of allies, one after the other, and becoming infinitely powerful.

In reality, however, this infinite series is interrupted by disappointing harvests and other misfortunes. Such misfortunes are ascribed to the sorcery of enemies, and in order to remove this sorcery, a *peka* is made with the enemies. A feast is held; and it is thought that matters will again improve. There is a periodicity of shortage and abundance, coinciding with the quality of external relations. Prior to the *pax Australiana*, bad external relations caused frequent warfare, the marauding of gardens or the lack of attention to gardens. Feasts had to be held occasionally so that the intensity of warfare would not lead to a serious depletion of food stocks. Feasts thus produced an abundance of food, because they provided peace, or at least a respite from war. The institution of feasting kept the scale of warfare down to a level which the people could economically afford. This ecological basis of the cyclical movement between war and peace is well documented in Rappaport's book about the Tsembaga (1968).

In terms of the model developed in this chapter we may express this cyclical process as follows:

MODEL 4

This exchange cycle belongs to the level of ecology rather than of social relations. The exchange partners in the model are man and his garden. The objects of exchange are the man's extra labour, needed to make a feast garden, and the abundance of taro that his garden can provide in good seasons. But it will not do so merely in response to man's labour. Labour alone cannot

5: Schwimmer E-4,5 (1966-1967) 1973
OJ23 Orokaiva OJ23
Mountain Orokaiva

guarantee success. The transaction between man and his garden must be mediated by the holding of a feast that will dispel noxious influences by which sorcerers have, in the past, spoilt a man's garden. After the feast, the garden will produce abundantly, but this abundance will not last. In fact, the resumption of social relations will lead naturally to hostility; again sorcery will spoil the harvest. Sorcery mediates between man and his garden to impel the gardener to make a new feast garden; thus the cycle is repeated.

This model (No. 4) expresses a point to which my Orokaiva informants returned time and again. The most important benefit an Orokaiva expects to get out of a feast is not improved social relations but a better taro harvest. The rituals of repentance and forgiveness which entered into models 1 and 3 are magical performances with improvement of the harvest as their ultimate purpose. Thus it is wise not to restrict our study of exchange to the social and economic levels only, because the basic transaction may occur on a quite different level, in this case between man and his garden. The method of analysis I am proposing here has the advantage that it moves with equal ease on all levels at which collective representations exist.

4. *The Starting Mechanism*

In this chapter I first sketched Orokaiva social philosophy; I then abstracted some simple diagrams to represent this philosophy. Some elements of the exchange cycles represented by these diagrams are found in all or most cultures. All cultures have transactions between hosts and guests; all agricultural societies have transactions between man and his garden. Exchanges of social objects such as repentance/forgiveness, labour/abundance arise out of universal tendencies of man or nature. There is, however, nothing universal or logically necessary in the particular mediating elements appearing in these diagrams. Meat and taro, good and bad magic, *peka* and *isoro* – these are all peculiarly Orokaiva means for the mediation of social exchange. When Homans and Blau developed their (sociological) theory of social exchange, they gave no systematic attention to mediating elements, and rightly so, because their interest was universal laws, and mediating elements are never universal. However, for the anthropologist, who usually treats cultures as a significant variable, the mediating elements are of special importance.

Nonetheless, even if particular mediating elements are not universal, the use of mediating elements is a universal characteristic of social exchange. Sociologists, by ignoring this fact, have occasionally found themselves in difficulties, as for instance in their discussions about the 'starting mechanism' of social exchange. Gouldner posed the problem clearly in his essay on 'The Norm of Reciprocity' (1960: 177):

> Let us suppose two people or groups, Ego and Alter, each possesses valuables sought by the other. Suppose further that each feels that the only motive the other has to conduct an exchange is the anticipated gratification it will bring. . . . At least since Hobbes, it has been recognised that under such circumstances each is likely to regard the impending exchange as dangerous and to view the other with some suspicion. . . . Thus the exchange may be

ordinance for the appointment of officers as "controllers of native plantations". The first of these, Mr. G.H. Murray, was appointed in 1920 to serve the whole Territory (P.A.R. 1920-1 : 28). It was not until 1923 that a permanent officer, Mr. A.T. Dawson, was posted to the Northern District. Neither officer had been trained in agriculture. 657 241

The people of the Northern District were reported to be receptive to the idea of having their own plantations and "practically no compulsion" was applied in getting initial agreement to the principle (P.A.R. 1923-4 : 16).

Planting began in 1923 and by 1925 fourteen of the plantations had been planted. Owing to a delay in obtaining cocoa seedlings from Java, 30 acres of cotton were planted in 1925 (P.A.R. 1924-5 : 27). The cotton experiment was a failure and was not repeated. By 1926 there were only 50 acres of cocoa, 10 acres of coffee and 6 acres of oil palm in the district.(1) Eleven of the plantations were of cocoa, one of coffee and two of oil palm. A little rice was also tried. The cocoa, oil palm and rice were soon abandoned by both government and the people owing to a drop in prices, and only the coffee was persevered with. 248 245 [249] [243]

In 1926 or 1927, a further 116 acres of land were cleared for coffee under government instructions, but the rate of expansion declined markedly thereafter. By 1936 there were 18 plantations totalling 242 acres under coffee in the Orokaiva area. 189 acres were then in bearing and the rest were expected to begin bearing by 1938. Plantings ranged in area from 4 to 30 acres. 245

Every able-bodied man between the ages of 16 and 36 years who lived within five miles of a plantation (except those employed by government, missions or European plantations) was required, by regulations under the ordinance, to work 60 245 466 [651]

(1) This figure included some private plantings in addition to those under the ordinance - P.A.R. 1926-7 : 10. Coffee seed was supplied from the government station at Higaturu.

Community rice and cocoa projects

797 In 1948, the Christian Co-operative Movement was formed by Father Clint of the Anglican Mission at Gona. The movement spread spontaneously throughout the Orokaiva country, though most of the co-operatives were only nominally 474 linked to the mission.(1) The main activity of the co-operatives [241] was the growing of rice, but some grew subsistence foods also, [258] and others made copra. Although the movement was referred to as a co-operative, its agricultural activities were in most cases communal: all participants were supposed to work at the same time and to undertake whatever work was allotted to them by the group leaders, and the benefits derived were to have been shared equally. Moreover, at least some villages required all resident adult males to participate in the scheme.

621 In most instances the village worked as the unit of production, but in some cases several neighbouring villages [243] worked together. Some large villages were divided into one or more groups for the purpose of the community rice garden. Each group had a committee of management and a chairman.

461 In general Monday and Tuesday of each week were set aside for work on the community gardens. Official patrol re- 794 ports noted that the movement had taken on many aspects of a cult. All stages of work were associated with an unusual amount of religious activity and the tools and buildings of the co-operatives were treated with great veneration. Keesing (1952 : 7) speaks of an "absorbing mystical context" and of rumours that Europeans would leave Papua as a result of the co-operatives. An official observer stated that the people considered "mere participation in the co-operatives would, magically or mystically, quickly raise their status in all re- 797 spects to that of Europeans". Orokaiva people have pointed 461 out to us that cash cropping projects initiated by the government had invariably failed. They felt that a mission project might be more successful. Moreover, whereas they were uncertain of the government's motives they felt the mission to be "on the side of the people", for by introducing them to co-

(1) The co-operative movement in this area is described in more detail in Dakeyne, 1963.

operatives they had given them the key to European prosperity. 461 [797]

Local enthusiasm was strong and a large acreage of rice was grown. However, no marketing facilities had been provided and although the mission had promoted the crop mainly to supplement traditional subsistence foods, most Orokaiva seem to have regarded it as a cash crop. They already had a plentiful range and volume of subsistence foods, and rice was not only harder to grow but also more difficult to prepare than the existing crops. Most of the rice grown was neither sold nor eaten, but was left to rot in the storehouses. 243 433

It is interesting to note that at Ongoho, despite the unfortunate experience with other community crops, all inhabitants of the same nine villages came together to plant a single rice plot. The project was organized by Haruma, the coffee boss, and the rice was planted on the land of the Akute'undi sub-clan. The crop was planted in 1949, and the rice was stored in a house built for the purpose. None of the rice was sold, a little was used for food, but most was left to rot. The experiment was not repeated. When asked why everyone combined to grow the rice instead of growing it individually, the people claimed that they had not realized at that time that cash crops could be grown by individuals. This view may seem incredible to a European, but we have heard it quoted in many parts of the Orokaiva area. Their whole experience of cash cropping had been of large scale enterprises, whether private European plantations, government plantations (which were established adjacent to many district headquarters), compulsory plantings under the regulations, or communal plantations under the ordinance. The introduction in 1955-6 of the concept of cash cropping by individuals was in a very real sense revolutionary.(1)

The idea of community economic activity was again given a boost in 1949 when war damage compensation was paid out. A small proportion was paid in cash, but most was deposited in savings bank accounts. Many government officers then in the area noted that the money was being used to buy 434 454 474

(1) It must be pointed out, however, that among the Orokaiva food gardening had always been undertaken by individuals. [241]

Hamburata Communal Garden

Before the war there were four cash crops planted at Hamburata: rice, coconut, palm oil and coffee. The rice was planted on Atupa clan's land. Five villages took part in the work .... There were 29 clans .... The villagers worked for the rice for one year without any pay. The rice was harvested in bags .... The people brought the bags of rice to Buna but the government did not pay them for the work they did on the rice. They worked for the rice for one year only .... 241 [465] [243]

The second crop planted at Hamburata was coconut. The coconut was planted on land of Atupa clan .... The coconut plants were still young when the villagers were told by the government to plant another crop. The crop was palm oil .... The palms were planted on Haumepa clan's land. The villagers planted the oil palm and looked after them for one year and the government told the people to plant another crop. The other crop was coffee. [249]

The coffee was planted on Seharipa clan's land .... They worked every day .... They got pay once in every year. The government officers used to come to the village. The government used to send police to the village to look after the people to work on the coffee .... When the war was near the government did not send the police to the village for this work. After that all the people in the village stopped work .... After the war they did not work on the plantation until the Mt Lamington eruption. The coffee was near the Ambogo river so the river was flooded and washed the plantation away .... 245 [625] [133]

Buna. The registering officer stated that 'the co-operative movement in this district is the only one yet far enough advanced for registration'.[1]

About this time, discussions were held between Rev. Clint and the local agricultural officers regarding the practicability of planting tree crops - especially coffee and cocoa - as eventual replacements for the annual crops then being grown. The problems associated with the establishment of these tree crops were not solved, however.[2] Had they been solved, a serious difference of opinion regarding policy would have been avoided. The divergence of views was between Rev. Clint, who saw the production of rice by co-operative methods mainly as a way of improving the subsistence diet of the people, and the people themselves, who saw it as a way of earning money. As time went on, it appeared to the villagers that Rev. Clint's interests lay only in subsistence crops and their enthusiasm began to wane. Towards the end of 1949 Rev. Clint became ill and he had to return permanently to Australia in January 1950.

In Rev. Clint's view Christian co-operatives had 'grown naturally out of the teachings of the Christian faith' (Clint 1950). Unfortunately he did not recognise that material considerations weighed at least as heavily as spiritual values in the minds of the people among whom he was working. The people had readily accepted a departure from the traditional practices of land tenure, an entirely different system of work organization; and the cultivation of a new crop, rice, which involved radical changes in their gardening techniques. The Yega, anticipating a substantial cash income, had welcomed these changes, but soon discovered that rice could not be converted readily to cash. There was no possibility of rice being grown in sufficient quantity in any one locality (for reasons of land availability and manpower) to justify the establishment of central milling facilities, and inadequate transport facilities prevented combination with other areas, even had these existed at that time. Without central milling, which would have produced a brown rice, properly dried, and saleable to the Administration and plantations, the only means of converting 'paddy' rice into a storable product was to use smaller semi-portable mills to produce white or polished rice. The milling, however, whilst converting

---

[1] Quoted in the Gona Anglican Mission Diary.

[2] Specifically, lack of knowledge of the soils in the area, lack of any experimental plantings, and a shortage of trained staff.

243 'paddy' to food, prevented the conversion of the food to cash,[1]
[262] though it was quite suitable for village consumption as a supplementary food. In fact, imported white rice has now become an important 'status' food at feasts.

474 Rice continued to be grown for about a year after Rev. Clint's
241 departure; small quantities were sold by the cupful but the income received would have been negligible. In 1951 the crop was attacked
[242] by a species of 'army worm' and on the recommendation of the District Agricultural Officer was destroyed. No further plantings were made and all co-operative agricultural activity lapsed.

By 1952 co-operative agricultural activity had ceased among the Yega. The death of Samuel Ungega (the only man in the co-operative who had any training in co-operative work and the only man capable of directing activities on a long-term basis), removed from the Gombe co-operative the main driving force.

[177] The basic reason for the failure of the Christian co-operative seems to have been that Rev. Clint's aim was to produce a storable food crop whereas the Yega wanted a cash crop. The scheme was established on an inadequate business basis and with insufficient understanding of the people's deep-seated desires.

The modern co-operative and the extent of Yega participation

474 A subsequent co-operative, organized by the Administration and
[241] known as the Gona Villages Native Society Limited, came into being in May 1953. In that month share capital amounting to $2542 was repaid by the Administration to 332 members of the old Gona, Gombe (Iaga) and Garara co-operatives, most of whom immediately became shareholders, at a uniform $10 per share, in the new society. The new co-operative was to serve different purposes from the earlier ventures. There was to be no attempt whatever at communal
[443] production. Functions were to provide marketing facilities for the agricultural produce of individual members and to conduct a retail trading store.

[347] Operations were begun in a store previously owned by A.H. Bunting Ltd on the Popondetta-Killerton Road, half a mile from Cape Killerton. Originally built from local materials and with a tin

[TEXT CONTINUED ON PAGE 64]

[659] [1] Only brown unpolished rice is issued as rations to the Administration and plantation labour. The endosperm and much of the vitamin content are removed in the production of white rice, so that employers issuing white rice would have to supply additional vitamins, an uneconomic proposition.

383 and later to be provided by the people themselves. This idea was
654 taken up by the villagers and the first bush rubber processed at Ombi-Tara was purchased by the Department of Agriculture on 5 June 1964.

[439] An Agricultural Assistant was stationed full time at Ombi-Tara and he helps to grade, weigh and bale the rubber.[1] The baled rubber is purchased monthly by an Agricultural Officer who drives to Ombi-Tara from Popondetta. It is marketed in Australia through the Papuan Rubber Pool.

249 Tapping is organised on a rotation system, with one man tapping
434 the bush rubber stand each month, producing between 70 and 200 lb of Ribbed Smoked Sheet, and earning between $12 and $34, depending of his diligence and the price of rubber.

383 In mid 1964 the villagers built a smoke house, a machine house
474 and a baling house, all of local materials, for the equipment on loan from the Department of Agriculture. The baling press was
[654] provided on permanent loan by a local planter.

[402] On 27 October 1964 an Ombi-Tara Village Savings Account was
[454] opened at a bank in Popondetta with the sum of $227.50. During the following year money was paid in at irregular intervals at an average rate of about $14 per month.

On 12 February 1965 the Ombi-Tara people paid $177.72 for their own rollers and coagulating pans which they now use for processing, leaving the Department of Agriculture free to transfer its equipment to another recently initiated scheme. Extra coagulating pans were bought for $91.20 on 16 October 1965, leaving a balance of $117.84 in the village account.

[651] No deposits were made between October 1965 and the end of January 1966 because of the need to save money to pay the Local Government Council tax ($5 per man) and the Mission jubilee contribution ($2 per householder).

● 243 While the bush rubber processing project appears to have been a
[797] success, almost every other attempt made by the Ombi-Tara people at planting cash crops has failed. They participated in a communal rice growing project in 1950, encouraged by the Anglican Mission, but it was a failure, as were similar projects in other parts of
245 the district. Later in the 1950s a communal cocoa plantation of
[654] some 400 trees was established with Administration encouragement. Disputes over the organisation of work and the distribution of proceeds caused the abandonment of the project shortly afterwards.[2]

---

[1] During our stay all rubber processed at Ombi-Tara was graded Ribbed Smoked Sheet No.2.

[2] On the communal rice and cocoa experiments in the Northern District see Crocombe 1964a:29-33.

276 439 from relatives who live in the mountain districts or else obtained by barter, or bought from other villages or at the Popondetta market.

245 [262] Sago is made and eaten when other crops fail, but the plants are also used as building material. As the supply of sago is very limited in both villages, the plants are highly prized. Inonda people owned only 21 trees so that the bulk of supplies was obtained from other areas, e.g., from wild sago trees over which they claim rights. In Sivepe, the total supply is in the vicinity of, probably, 300. This suffices for the local need, both as an occasional supplementation of the food supply and for building, when a great quantity is needed.

[199] The special position of sago among economic trees was shown clearly in Miss White's description of the building of Sasembata mission station shortly after the eruption. This was a big project in which all the surrounding villages (including Sivepe) collaborated. Labour was given free and so were all building materials--apart from sago for which payment was expected and made. I was told by informants this was because sago is a cultivated, not a bush tree. During my field work period, the mission again needed sago roofing for expansion and repair of buildings, but this time no payment was made. However, each household was asked for a contribution of only two strips of roofing. Thus, it was again treated as a resource of special value as other materials were not supplied in such strict rations.

[287] The ajimo tree, used for manufacturing bark cloth was not reported in Inonda by Crocombe and Hogbin but we did find a small quantity growing. Though bark cloth is only used for dancing costumes nowadays, in both villages, these dances still take place from time to time. The women's clubs have stimulated the production of painted bark cloth for sale, but this has not led to extra plantings. Sivepe's supply of ajimo trees was only one or two for most households, sufficient for an occasional festive garment with none to spare, but there was an abundance of ajimo in some other villages in the Sasembata district. Here we may notice a definite change between the pre-eruption period and the present at pre-eruption Inonda and because at Pamba, bark cloth was still the daily wear for everybody, so that the ajimo was an important economic tree. With this exception, there would seem to have been no change in the resources of economic trees of local origin.

241 177 The three introduced cash crops of significance in the two villages have been rice (pre-eruption), coffee and rubber; in both villages, one man grew a little cocoa. These industries, which developed in intensive interaction with Australian authorities, are perhaps better discussed in detail in a later chapter when these relationships are analysed. [243] Rice plots were developed in the period between the second world war and the eruption; the plots in both

241 villages had to be abandoned at the time of the eruption and rice
197 growing was never resumed. The growing of rubber by Orokaiva in
the Northern District has a long and somewhat unhappy history which
[243] will be referred to later; at the time of the eruption, just before
the Korean War drove up the prices, the rubber trees planted by
249 the Orokaiva were hardly harvested at all; Rimoldi reports that
311 in 1963 the existing stands at Sivepa were tapped to some extent
197 and the coagulum sold to a factory at Awala. There were six tappers
[434] in his population sample of 50, who together earned $70 in one year.
[474] When I began my field work, the tapping had ceased as the factory
was no longer buying indigenously grown rubber, but a rubber
cooperative was set up early in 1967, with the encouragement of
the Department of Agriculture, in a village about one mile from
Sivepa. The Department of Agriculture was also encouraging the
people to plant superior Malayan rubber trees and two men had
planted 250 and 72 trees respectively. Rimoldi reports that
"members of the clans now represented in Sivepa and Binduta"
owned four plots ranging from less than half an acre to about
three acres in area.

Since that time, however, a new plot has been established,
four and one-half acres in size, on which theoretically seven
men were to establish rubber stands. The Malayan trees were
planted here, as well as self-sown trees from the other plots
which were dug up and replanted. These plantings occurred shortly
after Rimoldi left. If the new cooperative venture succeeds, it
is likely that the new plot--most of which still remains unplanted--
will be exploited, but people were clearly waiting to see whether
sales at attractive prices would eventuate.

245 Orokaiva coffee plantations are wholly a post-eruption
197 development, inaugurated by the Agriculture Department shortly
311 after it was set up in Popondetta and greatly strengthened by the
setting up of a coffee cooperative, first under the Higaturu Local
Government Council and later independently. First plantings in
Sivepa were before 1954, in Inonda in 1955. Rimoldi reported that
in 1964, there were 1,100 coffee trees in Sivepa, owned by five
growers. Crocombe and Hogbin reported 801 trees in Inonda in
1962, owned by three households. Since that time, Inonda has not
added to its plantings, but Sivepa, along with the whole of the
Saiho Division, has greatly increased its cash-cropping activities
[439] since the 1964 census. The number of growers has increased from
five to 14--every able-bodied man in the vigor of life has his
coffee garden from which he derives an annual income of between
$50 and $100. This increase is the result of vigorous encouragement
of plantings by the Agriculture Department, a change of ideology
under the impact of the Local Government Councils and a great
improvement in the marketing arrangements. In 1966, Sivepa coffee
was collected and promptly paid for in Garombi village, about 15
minutes' walk from Sivepa. I did not take another coffee census

26: Schwimmer E-5 (1966-1970) 1974
OJ23 Orokaiva OJ23

we find that taro resembles them in that taro gifts are ritual statements by which attitudes toward social relations are communicated. We may say, to use Mr. Sperber's terminology again, that in this respect they form a code structure. It will be shown that this code structure is again nonhierarchical, thus resembling coconut and areca. On the other hand, a statistical study of the behavior of exchange partners shows that, on the level of exchange structure, there are rules by which a hierarchy is unconsciously generated between households and between villages. A system which combines a hierarchical network with a nonhierarchical code might be described, in my terms, as political, though incompletely so.

Most taro produced by the Orokaiva (over 90% in the villages surveyed) is consumed directly by the producing household. Nonetheless taro is the most ubiquitous of all Orokaiva objects of exchange; most households give some of it away every day. It is also part of the conventional set of gifts that change hands on virtually every ceremonial occasion. The main purpose of such gifts is usually the mediating of social relations rather than the setting up of a claim for a specific return gift. The ritual statements that may be made by means of taro gifts fall into two categories: raw taro, ritually given by men, tends to be part of a ceremony aimed at the establishment or restoration of social relations, whereas gifts of cooked taro, normally made by women, are part of the process of maintaining social relations of a certain degree of intimacy.

I shall base the following abbreviated analysis of taro symbolism on one myth. Of the several versions collected, I shall quote the fullest one, indicating variants where relevant. The name of the principal hero is usually given as Totoima, though this name does not appear in the version quoted. Williams has some references to the Totoima myth (see 1930:155, 158–159, 276), but these are not very illuminating. The following version was obtained from Samuel Jovareka, born at Kiorota and now a resident of Sivepe village:

> A husband slept with his wife. She became pregnant and gave birth to a small child. The husband came and asked:

26: Schwimmer E-5 (1966-1970) 1974
OJ23 Orokaiva OJ23

824
539

The story tells in more detail than is relevant here how the sister learned what had happened, how a magician from the neighboring mountain district of Managalase brought the brother back to life by giving him the heart and intestines of a wallaby, how this man married his sister and how the young man killed his father when the latter returned to complete his meal. He cut the father into many pieces, which were shared out among men whose descendants became the various language groups of the northern district, and multiplied exceedingly.

The informant who told me the myth suggested that its subject was the origin of taro cultivation. The whole text is deliberately ambiguous. When we are told of the woman giving birth to a child, we must think simultaneously of her harvesting a taro—and we must remember that among the Orokaiva only women are considered *capable* of harvesting taro. When the woman is told to cut the child's head off, the narrator is thinking simultaneously of harvested taro, which is considered to be still alive until the top is severed from the rhizome. Again, the woman's method of concealing her children is modeled on the treatment given to taro shoots (*bere*) when they are planted. The word *bivese*, in particular, denoting the heap of weeds with which the children are covered, is a gardening term.

[243]
[462]

The apparent lies used by the woman to hide her activities from her husband are truths if her statements are taken symbolically. For instance, the reference to "throwing the child into the water" calls to mind that the origin of taro in many myths is linked to the water and that the rainy season is metaphorically linked to the fostering of a child in the womb.

The true nature of Totoima, though familiar to every Orokaiva, is not explicitly set out in the myth presented here. In other tales he has tusks which he wears when he kills people, but which he lays aside when he goes to sleep. He is killed by his son after his tusks have been removed from his bed. I shall return to this theme in a later section of this essay. Meanwhile, we note that in attacking his son, lying in the *gaga*, Totoima behaves in the manner of a wild pig while his son behaves like harvested taro. Totoima has partly a pig nature, partly a human nature, and these aspects are only partly differentiated. His son,